

TerraScope

Quarterly Bulletin of International Environmental Affairs

view from the U.S.

The EPA changes course

The gears of change are in motion at the U.S. Environmental Protection Agency (EPA), signaling a major shift in the way businesses are regulated south of the border.

EPA ADMINISTRATOR CAROL BROWNER is seeking to transform that Agency with a new set of principles that reflect the latest thinking on environmental protection and cost-cutting needs.

The new strategy, called the Common Sense Initiative, is designed to move beyond reacting to immediate environmental problems by working with stakeholders to anticipate and prevent pollution. The EPA is looking to forego piecemeal solutions in favour of comprehensive responses based in science.

"Command and control regulation has proven to be a blunt and imprecise instrument, so (the) EPA is beginning to

"Command and control regulation has proven to be a blunt and imprecise instrument..."

-Browner

look at new, non-regulatory environmental protection mechanisms that build on (regulations) by encouraging voluntary action," Ms. Browner told a U.S. Congressional committee in July. "(The) EPA is preparing



for a future that will bring new, unanticipated problems and demands new, more creative solutions."

But many observers are unsure of what the new strategic shift will actually mean. Groups like the Washington, D.C.-based Chemical Manufacturers Association are taking a wait-and-see approach until the Agency translates its plan into concrete action.

"From an intellectual standpoint, it makes some sense," says Joe Mayhew, the association's Assistant Vice President, Environmental and Policy Analysis. "But we're unsure how it will play out."

The new approach involves a shift to ecosystem management, in which environmental needs are integrated with human and economic needs across geographic areas. This marks a shift from the Agency's traditional pollutant-by-pollutant approach.

The difficult task of balancing these needs is to be smoothed with a multi-stakeholder process in which the EPA will develop partnerships with industry, the public, and state, tribal and local governments.

They will be called upon to find solutions that stress pollution prevention and voluntary measures. *Continued on Page 2*

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Where pollution doesn't pay

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Small is beautiful in Asia

A handful of Canadian environmental firms have discovered that small size is no barrier to success in the thriving southeast Asian market.Page 7



following along the lines of the Climate Change Action Plan introduced in 1993 to meet U.S. commitments to the global Climate Change Convention.

One indicator of how these principles will come into play is the EPA's recent "Common Sense Initiative," a review of industry-wide environmental problems that marks a shift away from the traditional focus on air, water and land problems as distinct issues.

The initiative is designed to end the practice of making policy in response to emergencies like Love Canal, which led to the creation of the Superfund cleanup legislation for contaminated sites. With action on Superfund sites mired in lengthy and expensive legal battles, the EPA is eager to bridge the gap between traditional combatants—environmental activists and industry representatives—by bringing them together to reach consensus solutions.

In practical terms, this means multi-stakeholder reviews of major U.S. industries in which both environmental and economic impacts will be weighed. Six industrial sectors have been selected to lead the way, including iron and steel, automobiles and oil refining. Stakehold-

ers will be asked to review traditional issues like regulation and compliance as well as incentives for industry to develop innovative technologies which cut costs while meeting and exceeding regulations.

U.S. environmental groups leaders, like their counterparts in industry, are unsure—if not uneasy—about the Common Sense Initiative. A coalition of environmental organizations, led by the Washington, D.C.-based Environmental Defense Fund, is concerned that the EPA could use the initiative to ease regulatory requirements rather than promote pollution prevention, and that business interests participating in the industry reviews are being favoured over environmental groups. The two sides are working together to iron out their differences.

The approach used in the industry reviews bears a striking resemblance to the multi-stakeholder, consensus-based process that has become a mainstay of environmental policymaking in Canada.

For further details of the *Common Sense Initiative* see *Pollution Prevention News* (Aug.-Sept. '94), published by the U.S. EPA's Office of Pollution Prevention and Toxics, Washington, D.C. 20460. ☉

Canadians want action on climate change



Environics' September 1994 Environmental Monitor survey of 1,500 Canadians found that the vast majority believe Canada should take all action necessary to live up to our international commitments on climate change. Fully nine in ten (91%) thought Canada should take its commitment seriously, even after being told some other countries were not. In fact, more than one-third (34%) want Canada to exceed its commitments under the global Climate Change Convention.

TerraScope reacts to reader input

In a recent reader survey, we asked you to let us know what's right about *TerraScope* and what's not.

Here's what we heard.

TERRASCOPE'S SURVEY ATTRACTED A WIDE VARIETY of responses, providing many helpful suggestions on how it can better inform readers of important trends in international environmental affairs.

On balance, readers take a positive view of the publication and are optimistic about its potential to provide information about international issues from a Canadian perspective. You said it is an "easy read" that, for the most part, does not overlap with other publications. We discovered that *TerraScope* readers have diverse interests and information needs, and the survey turned up some common themes on how we can change for the better.

ON CONTENT, most respondents seem to prefer more

brief, newsy information on a wide variety of topics over lengthy, in-depth articles. *Our response:* shorter articles and more news briefs.

READERS CALLED FOR fewer articles promoting green businesses and identifying markets and more emphasis on other topics. *Our response:* more space will be devoted to new regulatory approaches; tracking international agreements; trends in environmental regulation, economic instruments and other key issues; developments in the resource and transportation sectors; and international activities at Environment Canada.

ON FORMAT, readers objected to the size and folding style of *TerraScope*, the spill-over of articles onto other pages and the combination of French and English in the same publication. *Our response:* switch to an eight-page, 8 1/2" x 11" format, eliminate most spill-over articles and print separate versions in French and English.

We hope that this issue of *TerraScope*—and future issues—shows that we've heard you by providing more useful information that's easy and enjoyable to read.

Keep the comments coming!

Sweden blazes the trail for green taxes

Sweden may soon expand its embrace of green taxes, confident that they are an effective way to protect the environment after three decades of experience with the charges.

NEW TAXES ON WASTE, ENERGY and natural gravel have been proposed as the Swedish government considers a radical policy shift that would increase taxation of environmentally harmful activities and reduce taxes on desirable targets like employment and savings. The new charges, if approved in the government's upcoming January 1995 budget, would expand upon an existing base of 10 environmental taxes.

Already, Sweden has gone further than any other country—even its like-minded Scandinavian neighbours—in the introduction of green taxes. Most other countries continue to debate them from the sidelines, unsure of their impact on the environment and competitiveness.

The taxes are intended to act as an incentive for people and businesses to behave in ways that reduce damage to the environment and, in some cases, to finance environmental policy measures. Economic instruments like green taxes are part of governments' tool bags of environmental measures which also includes regulations and voluntary agreements with industry.

By and large, the Swedish government believes the incentives have worked, particularly with charges designed to reduce NO_x and SO_2 outputs, according to a recent review by its Ministry of Environment and Natural Resources.

"These things have had a big impact on emissions," says Stephen Smith,

Deputy Director of the Institute for Fiscal Studies, an independent research organization, in London.

For instance, taxes introduced in 1991 on sulphur content in fuels have stimu-

taxes have come under fire in many countries from opponents who believe they are little more than a thinly disguised tax grab, and that environmental goals are secondary. But Smith argues that there is little evidence to support this charge, pointing to the example of Sweden's carbon tax, introduced in 1991 concurrently with an income tax cut.

In certain cases, such as Sweden's taxes on batteries and fertilizers, regulations ensure that most revenues generated are earmarked for environmental purposes.

Another concern is that green taxes will erode international competitiveness, particularly when countries proceed alone. However, Smith believes that this criticism is unjustified except in cases where the tax is set too high.

While the impact on competitiveness has been a concern for Swedish business, green taxes have been well-received among the general public, says Stefan Nystrom, Head of Environmental




Going down: SO_2 emissions have been reduced from a peak of more than 900,000 tonnes a year in the late 1970s to about 110,000 tonnes in 1991.

lated a shift from high sulphur fuels to cleaner energy sources. The sulphur content in fuel oils has fallen to 38% below permitted levels since the tax was imposed. This, combined with previous sulphur content regulations, the expansion of nuclear power and other factors, has helped reduce SO_2 emissions from a peak of more than 900,000 tonnes a year in the late 1970s to about 110,000 tonnes in 1991.

In spite of this apparent success, green

Analysis and Policy Strategy at Sweden's Ministry of the Environment and Natural Resources.

A major review of these questions by the Organization for Economic Cooperation and Development (OECD) is due to be completed soon. It may provide the answers that many countries, including Canada, are looking for as they debate the use of green taxes to meet their international commitments and achieve other environmental goals. 



view from
The UN

An interview with UNEP's Elizabeth Dowdeswell

Elizabeth Dowdeswell has given Canada a strong presence in international environmental affairs since she was appointed Under Secretary-General for the UN Environment Programme (UNEP) and the UN Centre for Human Settlements (Habitat) in January 1993. Previously, she served as a senior public servant with the Saskatchewan and Canadian governments. *TerraScope* spoke with her in Toronto during a recent visit.

TERRASCOPE: *What are the key environmental challenges at the global level?*

DOWDESWELL: A fundamental challenge is recasting how we approach environmental issues in the context of sustainable development. This requires a marrying of the concepts of environment and the economy, not just a continuation of traditional methods of dealing with environmental problems.

Environment and trade is another important area. It's a bread and butter issue that's part of the new agenda. Trade provisions are now commonly included in environmental agreements while environmental considerations are finding their way into trade agreements.

Many of the issues covered by international conventions require global attention. These include climate change, biodiversity, desertification, forests, ozone depletion and the transport of hazardous wastes. The Montreal Protocol (on ozone depleting substances) is one of the few international conventions that has fully engaged the

private sector, allowing it to move ahead quickly. But under the Climate Change Convention, in which the consensus about global warming is coalescing, many countries are not going to meet their greenhouse gas reduction targets. We're going to need to move farther and faster.

TERRASCOPE: *Has the international response to date been adequate?*

DOWDESWELL: I'm very impatient. Developed nations are going to have to reaffirm the commitments they made in Rio (at the United Nations Conference on Environment and Development). The bargain that was struck between North and South for the transfer of resources just hasn't been realized. Many countries

feel they have been betrayed.

The really bright light isn't governments, rather it's the local communities and the private sector. It's the European cities that are banning cars from city centres, the African villages that use more efficient cooking methods to reduce

"Developed nations are going to have to reaffirm the commitments they made in Rio... many countries feel they have been betrayed."

deforestation, and industry which has invested heavily in R & D toward the development of CFC-free fridges and electric cars.

TERRASCOPE: How should Canada respond to the global challenges?

DOWDESWELL: With enthusiasm, energy and commitment. Canada should

get out in front instead of lagging behind. Some private sector organizations are rising to the challenge, but governments work notoriously slowly.

We have to recognize that national boundaries are disappearing, that we're all interconnected. For instance, it does matter to Canada if Costa Rica cuts down all its trees. Canada can't solve acid rain without the assistance of the United States. So it's in our best interests to ensure that there are no safe havens around the world for environmental degradation. You can argue it altruistically, you can argue it economically and environmentally, but we do need to work with others.

TERRASCOPE: What are the key environmental challenges facing Canada?

DOWDESWELL: For years to come, there will still be concern over clean, safe drinking water, topsoil loss, air pollution and ground-level ozone. Canada's fisheries are a major area of concern, particularly land-based sources of marine pollution and the impact of agricultural runoff and industrial pollution in the Great Lakes. Canadians are profligate consumers of energy. To meet its Climate Change commitments, Canada must make changes.

TERRASCOPE: What opportunities are available to Canada in the global environmental field?

DOWDESWELL: There are some great areas of opportunity for Canada. For example, in meeting its commitments to the Climate Change Convention, Canada could develop technologies for sale to the rest of the world. Take China. It needs to use its soft coal resources to fuel development. Canada should be there right now selling clean coal technologies, and getting recognition (under the Convention) for helping CO₂ reduction

"Canada has the hardware and the software to make a business of environmental technologies. But if we don't wake up, Germany and Japan will be way ahead."

efforts there.

Canada has the hardware and the software to make a business of environmental technologies. But if we don't wake up, Germany and Japan will be way ahead. The question is whether you're going to do the least you can do to meet your commitments or

to embrace change, not only for the environment, but because it's in your best interests to do so.

What Canadians don't know is how phenomenally well-regarded we are abroad. It means we have opportunities where others might encounter resistance. ☉

Hamilton to host G-7 environment summit

Environment Ministers from the G-7 industrialized nations will meet in Hamilton in April 1995. Canadian Deputy Prime Minister and Environment Minister Sheila Copps will host environment colleagues from the U.S., U.K., France, Germany, Italy and Japan, as well as the E.U., at a meeting that will likely include discussions on greening government, employment and environment, climate change, biodiversity and international institutions. The outcome will contribute to discussions by leaders at the G-7 Summit in Halifax in June.



PHOTO: GSC

White House panel targets personal vehicles

Return to 1990 emission levels sought by 2005

U.S. PRESIDENT BILL CLINTON has launched a probe into methods of reducing greenhouse gas emissions from personal motor vehicles like cars and small trucks. The initiative—part of the President's Climate Change Action Plan—is intended to help the U.S. meet its commitments under the global Climate Change Convention.

A multi-stakeholder committee, including representatives from the Big Three car manufacturers, unions, envi-

ronmental groups and state and local governments, has been given one year to come up with recommendations on cost-effective policies that would reduce greenhouse gas emissions from personal motor vehicles to their 1990 level by the year 2005. A wide range of policy alternatives are to be considered, including policies affecting demand for personal vehicle travel, advances in vehicle and fuel technologies, and shifts in consumer choice among those technologies.

Experts pessimistic about Rio Conventions

No repeat of Montreal Protocol success

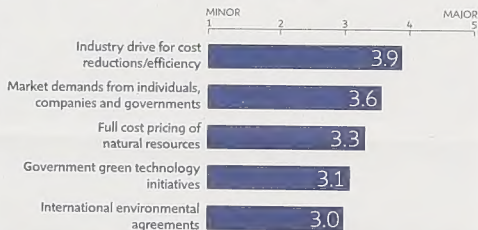
ASKED TO RANK DIFFERENT POSSIBLE drivers of green technology, 75 sustainable development experts in the G7 countries predict that industry's need to reduce costs and improve efficiency will be the major driver, along with market demand from individuals, companies and governments (See chart below).

The October 1994 GlobeScan survey, conducted by Synergetics Consulting of Toronto, also revealed that leading

experts were pessimistic about the role both international environmental agreements and government green industry initiatives will play in directing and driving green technology development over the next five years.

The pessimism concerning the role of Rio international conventions is somewhat surprising given the major role the Montreal Protocol on ozone-depleting substances has played in technology development since it was enacted.

DRIVERS OF GREEN TECHNOLOGY



Results of the October 1994 GlobeScan survey, in which 75 sustainable development experts from G7 countries were asked to rank the importance of different technology drivers on a 5-point scale, where 1 indicated a "minor" role in driving green technologies and 5 indicated a "major" role.

Environmental Commissioner for Canada

Canada will soon establish a Commissioner of the Environment and Sustainable Development to monitor the federal Government's environmental performance. The Commissioner, to be appointed to the Office of the Auditor General, will assess the Government's progress in integrating the environment into its decision-making. The office will report annually on the success of federal programs and spending in supporting the shift to sustainable development, and will evaluate the implementation and enforcement of federal environmental laws.

The Commissioner, expected to be appointed in early 1995, will play an important role in holding the government publicly accountable for environmental initiatives such as the current multi-stakeholder task force that is identifying barriers and disincentives to sound environmental practices and the effective use of economic instruments.

As part of the initiative, Ministers will be required to table sustainable development strategies for their Departments within two years of amendments to the Auditor General Act.

California moves to cut pesticide use

Legislation based on successful pilot program for orchard growers



THE CALIFORNIA LEGISLATURE has just approved a new program that offers technical support and financial incentives to farmers to help them reduce the use of pesticides and synthetic fertilizers by adopting biological farming systems. The initiative stresses farming techniques that encourage ecologically-based methods that use cover crops, compost, beneficial insects and other biological controls, and crop management as

part of whole farm planning. It is based on a successful pilot program for orchard growers that has been credited with helping them to reduce their reliance on synthetic chemicals while maintaining yields.

The new program, which relies on farmer-to-farmer assistance and training, has been endorsed by mainstream agricultural organizations, environmental groups, state agencies and the U.S. EPA.

Small scale solutions make big inroads in Asia

In a global marketplace dominated by giants, a handful of Canadian entrepreneurs have found that tiny is perfect when it comes to cracking the Asian market for environmental products.

MABAREX INC. OF ST. LAURENT, Que., CMS Group Inc. of Concord, Ont., Barrie, Ont.-based SciCorp Systems Inc. and a growing list of other companies have succeeded in the newly-industrialized countries of southeast Asia by targeting specialized deals in the wastewater treatment field.

Although smaller companies like these may be discouraged by the time and money needed to conduct international business, these obstacles can be reduced by going after smaller contracts, says Sherrill Owen, a Team Leader at Industry Canada who helped organize recent trade missions to ASEAN (Association of South East Asian Nations) countries. These firms can profit from deals that are too small to attract the interest of major players.

Following this approach, SciCorp and CMS Group have landed contracts within their first year in the ASEAN market. SciCorp now has operations in eleven countries.

Unlike most exporters to the region, SciCorp has gained fast access for its products—formulations of micronutrients that enhance biological action in wastewater lagoons and septic tanks. (These types of treatment facilities are com-

mon for industries and municipalities in south-east Asia, where there are relatively few full-scale treatment systems.)

SciCorp's products are relatively inexpensive, fast-acting and transportable. By speeding the breakdown of organic materials, they optimize existing treatment facilities, giving them almost immediate appeal in developing countries wishing to avoid costly invest-

ments in wastewater plants.

"When you have a product that offers immediate results and with no capital cost, you get a lot of interest," says Michael Beckley, Projects Coordinator for SciCorp.

Another small company that has made rapid inroads is CMS Group, a manufacturer of biological wastewater treatment equipment fitted with a mechanical device that accelerates the breakdown of organic materials. After just three trips to

Asia, the company has chalked up three orders and has signed memoranda of understanding to form joint ventures in four countries.

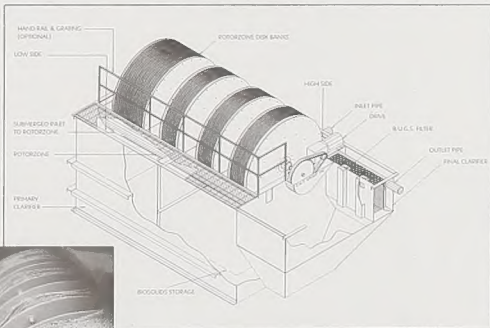
Vice President Tom Smith attributes the firm's rapid-fire success largely to their Rotordisk system's relative simplicity, ease of operation and small scale. Combined with old-

fashioned salesmanship, these attributes have helped both his company and SciCorp dart ahead of the long, slow path followed by most exporters to southeast Asia.

"We stress the fact that it's a long-term

"When you have a product that offers immediate results and with no capital cost, you get a lot of interest."

—Michael Beckley, SciCorp Systems Inc.



THE ROTORDISK, manufactured by CMS Group Inc. in Concord, Ontario, accelerates the breakdown of organic materials in biological wastewater treatment systems, which are used by many Asian industries and municipalities.

commitment, and not a cheap one," Owen says. "If you're really going to work those markets, you've got to be back every six months."

The experience of Mabarex, a full service manufacturer of wastewater treatment systems, follows this mold. The company, which is targeting medium-sized installations, has invested a considerable amount of time and money to establish partnerships in Asia before it pursues sales contracts.


"Personal contact is the most important first step in Asia," says Mabarex Director of International Development, Walter Schein. "You have to gain confidence before anything is put down on paper."

But he is confident that the opportunities will justify the up-front investment as southeast Asia grapples with an onslaught of environmental problems in the wake of rapid economic expansion.

According to Owen, the likes of Mabarex, CMS Group and SciCorp are especially well-positioned to seize these opportunities because initial efforts to deal with the region's environmental problems have focused on immediate needs like the treatment of wastewater and drinking water. Similarly, there are opportunities for providers of geographic information systems and consultants for program development and training, she says.

Industry Canada has introduced dozens of environmental companies in these fields to the southeast Asian market

through regular trade missions to ASEAN countries. The next trip is scheduled for spring, 1995.

For more information on environmental trade missions to southeast Asia, contact Sherrill Owen, Team Leader, Industry Canada at (613) 954-2938. 

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is the most
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**—Walter Schein,
Mabarex Inc.**

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